(FILE 'HOME' ENTERED AT 15:12:48 ON 05 SEP 2003)

FILE 'ADISCTI, ADISINSIGHT, ADISNEWS, BIOSIS, BIOTECHNO, CANCERLIT, CAPLUS, CEN, DGENE, DRUGB, DRUGLAUNCH, DRUGMONOG2, DRUGNL, DRUGU, EMBAL, EMBASE, ESBIOBASE, IFIPAT, IPA, JICST-EPLUS, KOSMET, LIFESCI, MEDICONF, MEDLINE, NAPRALERT, NLDB, NUTRACEUT, ...' ENTERED AT 15:21:48 ON 05 SEP 2003

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L1       1035601 S (MONONUCLEAR OR LEUKOCYTE)
L2         88578 S L1 (P) (LYMPHOMA OR GRAFT OR ALLOGRAFT TRANSPLANTATION OR TR
L3         32685 S L2 AND PD<2001
L4         18013 DUP REM L3 (14672 DUPLICATES REMOVED)
L5            29 S L4 AND IMMUNE (W) DYSFUNCTION
L6             8 S L5 AND (MONONUCLEAR (W) CELL)
L7             8 S L6 AND (LYMPHOMA OR GRAFT OR ALLOGRAFT TRANSPLANTATION OR T
L8        158189 S LEUKOCYTE/AB
L9         31251 S LEUKOCYTE/TI AND L8
L10        16908 S L9 AND PD<2001
L11         1399 S L10 AND (LYMPHOMA OR GRAFT OR ALLOGRAFT TRANSPLANTATION OR T
L12         1065 S L10 AND (LYMPHOMA OR GRAFT OR ALLOGRAFT TRANSPLANTATION OR T
L13          586 DUP REM L12 (479 DUPLICATES REMOVED)
L14           61 S L13 AND (TRANSFUSION OR INFUSION)
L15           36 S L14 AND BLOOD
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(FILE 'HOME' ENTERED AT 15:12:48 ON 05 SEP 2003)

FILE 'ADISCTI, ADISINSIGHT, ADISNEWS, BIOSIS, BIOTECHNO, CANCERLIT, CAPLUS, CEN, DGENE, DRUGB, DRUGLAUNCH, DRUGMONOG2, DRUGNL, DRUGU, EMBAL, EMBASE, ESBIOBASE, IFIPAT, IPA, JICST-EPLUS, KOSMET, LIFESCI, MEDICONF, MEDLINE, NAPRALERT, NLDB, NUTRACEUT, ...' ENTERED AT 15:21:48 ON 05 SEP 2003

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L1       1035601 S (MONONUCLEAR OR LEUKOCYTE)
L2         88578 S L1 (P) (LYMPHOMA OR GRAFT OR ALLOGRAFT TRANSPLANTATION OR TR
L3         32685 S L2 AND PD<2001
L4         18013 DUP REM L3 (14672 DUPLICATES REMOVED)
L5            29 S L4 AND IMMUNE (W) DYSFUNCTION
L6             8 S L5 AND (MONONUCLEAR (W) CELL)
L7             8 S L6 AND (LYMPHOMA OR GRAFT OR ALLOGRAFT TRANSPLANTATION OR T
L8        158189 S LEUKOCYTE/AB
L9         31251 S LEUKOCYTE/TI AND L8
L10        16908 S L9 AND PD<2001
L11         1399 S L10 AND (LYMPHOMA OR GRAFT OR ALLOGRAFT TRANSPLANTATION OR T
L12         1065 S L10 AND (LYMPHOMA OR GRAFT OR ALLOGRAFT TRANSPLANTATION OR T
L13          586 DUP REM L12 (479 DUPLICATES REMOVED)
L14           61 S L13 AND (TRANSFUSION OR INFUSION)
L15           36 S L14 AND BLOOD
L16          787 S LEUKOCYTE (W) INFUSION
L17          160 S L16 AND (LYMPHOMA OR ALLOGRAFT OR ERYTHEMATOSUS OR RHEUMATOI
L18           76 DUP REM L17 (84 DUPLICATES REMOVED)
L19           26 S L18 AND PD<2001
L20           26 S L19 NOT L15
L21          116 S L16 (P) (LYMPHOMA OR ALLOGRAFT OR ERYTHEMATOSUS OR RHEUMATOI
L22           33 S L21 AND PD<2001

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L15 ANSWER 1 OF 36 CAPLUS COPYRIGHT 2003 ACS on STN
TI Effect of **leukocyte** compatibility on neutrophil increment after **transfusion** of granulocyte colony-stimulating factor-mobilized prophylactic granulocyte transfusions and on clinical outcomes after stem cell transplantation
SO Blood (**2000**), 95(11), 3605-3612
CODEN: BLOOAW; ISSN: 0006-4971
AB The primary limitations of granulocyte transfusions include low component cell dose and **leukocyte** incompatibility. Component cell dose improved with granulocyte colony-stimulating factor (G-CSF) mobilization, and the **transfusion** of G-CSF-mobilized, human **leukocyte** antigen (HLA)-matched granulocyte components resulted in significant, sustained abs. neutrophil count (ANC) increments. However, the effect of **leukocyte** compatibility on outcomes with G-CSF-mobilized granulocyte transfusions is unclear. The objectives were to det. the effect of **leukocyte** compatibility on ANC increments and selected clin. outcomes after **transfusion** of prophylactic, G-CSF-mobilized granulocyte components into neutropenic recipients of autologous peripheral **blood** stem cell (PBSC) transplants. Beginning on **transplant** day 2, 23 evaluable recipients were scheduled to receive 4 alternate-day transfusions of granulocyte components apheresed from a single donor. . . given G-CSF, G-CSF was also given to recipients after transplantation. Recipient ANC was detd. before and sequentially after each granulocyte **transfusion** to det. the peak ANC increment. **Leukocyte** compatibility was detd. at study entry only by a lymphocytotoxicity screening assay (s-LCA) against a panel of HLA-defined cells. Eight reclplents had pos. s-LCA. On days 2 and 4, the mean peak ANC increments after granulocyte **transfusion** were comparable between the cohorts with pos. and neg. s-LCA. However, the mean peak ANC increments on day 6 (246/.mu.L. . . day 8 (283/.mu.L vs 1079/.mu.L; P = .06) were lower in the cohort with pos. s-LCA, in spite of the **transfusion** of comparable component cell doses. Adverse reactions occurred with only 5 of 87 (5.7%) granulocyte transfusions and were not assocd. with **leukocyte** compatibility test results. Platelet increments, detd. 1 h after granulocyte **transfusion**, were comparable between the cohorts. Although the 2 cohorts received PBSC components with similar CD34+ cell doses, the cohort with. . . delayed neutrophil engraftment and a greater no. of febrile days and required more days of i.v. antibiotics and platelet transfusions. **Leukocyte** incompatibility adversely affected ANC increments after the **transfusion** of G-CSF-mobilized granulocyte components and clin. outcomes after PBSC transplantation.

L15 ANSWER 2 OF 36 CAPLUS COPYRIGHT 2003 ACS on STN
TI Graft-versus-leukemia effect and donor **leukocyte transfusion**. Efficacy of alloimmunity
SO Molecular Medicine (Tokyo) (**1999**), 36(7), 754-761
CODEN: MOLMEL; ISSN: 0918-6557
AB A review with 27 refs. on GVL (**graft**-vs.-leukemia) effects of DLT (donor **leukocyte transfusion**) after bone marrow transplantation, on DLT for treatment of recurrent malignancy in marrow grafted patients, on new approaches for DLT,. . .
ST review graft leukemia leukocyte **transfusion** alloimmunity
IT Immunity
(alloimmunity; graft-vs.-leukemia effect and donor leukocyte **transfusion** in relation to alloimmunity)
IT **Blood transfusion**
Leukemia
Leukocyte
(graft-vs.-leukemia effect and donor leukocyte **transfusion** in relation to alloimmunity)

L15 ANSWER 3 OF 36 CAPLUS COPYRIGHT 2003 ACS on STN

TI Survival of donor **leukocyte** subpopulations in immunocompetent **transfusion** recipients: frequent long-term microchimerism in severe trauma patients

SO Blood (**1999**), 93(9), 3127-3139
CODEN: BLOOAW; ISSN: 0006-4971

AB . . . reported detection of a transient increase in circulating donor leukocytes (WBCs) in immunocompetent recipients 3 to 5 days posttransfusion (tx) (**Blood** 85:1207, 1995). We have now characterized survival kinetics of specific donor WBC subsets in addnl. tx populations. Eight female elective. . . and 14 post-tx. Ten female trauma pts transfused with a total of 4 to 18 U of relatively fresh red **blood** cells were sampled up to 1.5 yr post-tx. WBC subsets from frozen whole **blood** were isolated using CD4, CD8 (T cell), CD15 (myeloid), and CD19 (B cell) antibody-coated magnetic beads. Donor WBCs were counted by quant. polymerase chain reaction (PCR) of male-specific sex detg. region (SRY) sequences. PCR HLA typing and mixed **leukocyte** reaction (MLR) between recipient and donor WBCs were performed on two of the trauma tx recipients who had long-term chimerism. . . leukocytes. A better understanding of factors detg. clearance vs. chimerism of transfused leukocytes is crit. to prevention of alloimmunization and **transfusion**-induced **graft** -vs.-host disease, and, potentially, to induction of tolerance for transplantation.

L15 ANSWER 4 OF 36 CAPLUS COPYRIGHT 2003 ACS on STN

TI Generation of bcr-abl specific cytotoxic T-lymphocytes by using dendritic cells pulsed with bcr-abl (b3a2) peptide: its applicability for donor **leukocyte transfusion** in marrow grafted CML patients

SO Leukemia (**1999**), 13(2), 166-174
CODEN: LEUKED; ISSN: 0887-6924

AB . . . (b3a2) peptide to generate b3a2-specific autologous or HLA-identical sibling donor's cytotoxic T-lymphocytes (CTL). DC that were grown from normal peripheral **blood** adherent cells or purified DC precursors in the presence of GM-CSF and IL-4, were pulsed with b3a2-peptide then were induced. . . addn. of TNF-.alpha.. These peptide-pulsed mature DC elicited a potent b3a2-specific CTL response in vitro. The b3a2-peptide pulsed DC-primed peripheral **blood** lymphocytes (PBL) displayed significantly higher cytotoxic activity compared with peptide non-pulsed DC-primed PBL against target cells, which are b3a2 pos.. . . peptide non-pulsed autologous macrophages. These findings revealed that normal donor PBL pre-immunized with b3a2-peptide pulsed autologous DC could increase the **graft**-vs.-leukemia effect without exaggerating **graft**-vs.-host-disease. Both CD8+ and CD4+ T lymphocytes were shown to be involved in the effector cell populations. The b3a2 peptide-pulsed DC-primed. . . results imply the feasibility of developing b3a2 peptide-DC based protocol for in vitro sensitization of normal donor leukocytes before donor **leukocyte** transfusions for patients with CML, who relapsed after HLA-matched sibling bone marrow transplantation.

IT Phosphoproteins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(P210bcr-c-abl; autologous dendritic cells induce bcr-abl peptide-specific cytotoxic T-cell recognition of allogeneic chronic myelogenous leukemia cells in relation to **transfusion** for relapse in bone marrow allotransplant)

IT Transplant and Transplantation
Transplant and Transplantation
(allotransplant, bone marrow; autologous dendritic cells induce bcr-abl peptide-specific cytotoxic T-cell recognition of allogeneic chronic myelogenous leukemia cells in relation to **transfusion** for relapse in)

IT Bone marrow
(allotransplant; autologous dendritic cells induce bcr-abl peptide-specific cytotoxic T-cell recognition of allogeneic chronic

myelogenous leukemia cells in relation to **transfusion** for relapse in)

IT Dendritic cell
(autologous dendritic cells induce bcr-abl peptide-specific cytotoxic T-cell recognition of allogeneic chronic myelogenous leukemia cells in relation to **transfusion** for relapse after bone marrow transplantation)

IT Adoptive immunotherapy
Blood transfusion
(autologous dendritic cells induce bcr-abl peptide-specific cytotoxic T-cell recognition of allogeneic chronic myelogenous leukemia cells in relation to **transfusion** for relapse in bone marrow allotransplant)

IT Leukemia
(chronic myelocytic; autologous dendritic cells induce bcr-abl peptide-specific cytotoxic T-cell recognition of allogeneic chronic myelogenous leukemia cells in relation to **transfusion** for relapse after bone marrow transplantation)

IT T cell (lymphocyte)
(cytotoxic; autologous dendritic cells induce bcr-abl peptide-specific cytotoxic T-cell recognition of allogeneic chronic myelogenous leukemia cells in relation to **transfusion** for relapse after bone marrow transplantation)

IT Tumor necrosis factors
RL: BSU (Biological study, unclassified); MFM (Metabolic formation); BIOL (Biological study); FORM (Formation, nonpreparative)
(expression by bcr-abl peptide-specific cytotoxic T-cells primed by autologous dendritic cells in relation to **transfusion** for relapsed chronic myelogenous leukemia after bone marrow transplantation)

IT 226560-54-9
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(autologous dendritic cells induce bcr-abl peptide-specific cytotoxic T-cell recognition of allogeneic chronic myelogenous leukemia cells in relation to **transfusion** for relapse in bone marrow allotransplant)

IT 138238-67-2
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(autologous dendritic cells induce bcr-abl peptide-specific cytotoxic T-cell recognition of allogeneic chronic myelogenous leukemia cells in relation to **transfusion** for relapse in bone marrow allotransplant)

IT 83869-56-1, Granulocyte-macrophage colony-stimulating factor
RL: BSU (Biological study, unclassified); MFM (Metabolic formation); BIOL (Biological study); FORM (Formation, nonpreparative)
(expression by bcr-abl peptide-specific cytotoxic T-cells primed by autologous dendritic cells in relation to **transfusion** for relapsed chronic myelogenous leukemia after bone marrow transplantation)

L15 ANSWER 5 OF 36 CAPLUS COPYRIGHT 2003 ACS on STN

TI Method of treating leukocytes, **leukocyte** compositions and methods of use thereof

PI WO 9903976 A2 **19990128**

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9903976	A2	19990128	WO 1998-US15067	19980721 <--
WO 9903976	A3	19990527		

W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

EP 1005531 A2 20000607 EP 1998-936943 19980721 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI

AU 748074 B2 20020530 AU 1998-85776 19980721 <--
AU 9885776 A1 19990210
JP 2003520563 T2 20030708 JP 2000-503182 19980721

AB . . . invention provides methods and compns. for treating leukocytes to arrest proliferation of the leukocytes and render them ineffective in eliciting **graft**-vs.-host disease (GVHD), but effective to enhance engraftment of allogeneic donor cells and promote destruction of diseased cells or pathogens. The diseased cells are cancerous or virus-infected cells. **Leukocyte** compns. and methods of use of these compns. in alleviating disease, facilitating various types of immune reconstitution and immunotherapy, and enhancing engraftment of allogeneic donor cells, are also provided. These proliferation-inhibited leukocytes for use in **transfusion** are prepd. by treating with replication inhibiting compd. selecting from .beta.-alanine,N-(acridin-9-yl),2-[bis(2-chloroethyl)amino]ethyl ester and analogs, topoisomerase inhibitors, camptothecin, daunomycin, furocumarins, actinomycins,. . .

IT **Blood** vessel
(endothelium, cells; prepn. of proliferation-inhibited leukocytes with replication-inhibiting compd. or topoisomerase inhibitor for destroying cancerous or infected cells and pathogens)

IT **Blood**
(whole; prepn. of proliferation-inhibited leukocytes with replication-inhibiting compd. or topoisomerase inhibitor for destructing cancerous or infected cells and pathogens)

L15 ANSWER 6 OF 36 CAPLUS COPYRIGHT 2003 ACS on STN

TI Cytokine mRNA and protein expression in a mixed **leukocyte** reaction before and after allogeneic transfusions

SO Transplantation (**1998**), 66(3), 376-384
CODEN: TRPLAU; ISSN: 0041-1337

AB The precise mechanism by which pre-**transplant blood** transfusions may favorably influence the **graft** outcome in human transplantation remains unknown. Here, the authors explored whether the mechanism might be related to an alteration of cytokine response to transplantation antigens. Eight patients awaiting kidney transplantation were selected to receive a single planned pre-**transplant blood transfusion**. Before **transfusion** and 7 days after **transfusion**, peripheral **blood** mononuclear cells from these patients were isolated and in vitro stimulated in a 1-way mixed **leukocyte** reaction (MLR) by using allogeneic fixed Epstein Barr virus-transformed cells as stimulators. The use of a semiquant. reverse-transcriptase polymerase chain. . . revealed that allo-stimulation by donor cells clearly induced accumulation of interleukin (IL)-2, IL-4, interferon (IFN)-.gamma., and IL-10 mRNA in peripheral **blood** mononuclear cells collected both before and after **transfusion** (8 of 8 patients). However, both T helper 1 (IFN-.gamma.) and T helper 2 (IL-4) cytokine responses were more elevated after **transfusion** in 8 of 8 patients, as were IL-2 responses in 5 of 8 patients. Such up-regulation of cytokine responses by **transfusion** was mostly directed against **blood** donor cells. Indeed, after stimulation by third-party cells, this up-regulation was both inconstant (2 of 3 patients) and of less. . . stimulation by autologous cells (3 of 3 patients). That IL-2, IL-4, and IFN-.gamma. responses to donor cells were increased by **transfusion** was further supported by results on cytokine secretion showing increased levels of IL-2, IFN-.gamma., and IL-4 proteins in supernatants of post-**transfusion** MLR as compared with pretransfusion MLR. In contrast, **transfusion**-induced changes in the amt. of IL-10 mRNAs were not

obvious and were quite variable from one patient to another.
ST cytokine allogeneic **blood transfusion** transplant
IT **Blood transfusion**
(allogeneic, pre-transplant; cytokine mRNA and protein response to transplant antigens before and after allogeneic transfusions)

L15 ANSWER 7 OF 36 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V. on STN
TI Donor **leukocyte** infusions after bone marrow transplantation in childdren: Series from a single institution and review of the literature.
SO International Journal of Pediatric Hematology/Oncology, (**2000**) 7/2 (71-79).
Refs: 31
ISSN: 1070-2903 CODEN: IPHOE4
AB . . . relapse after bone marrow transplantation for hematologic malignancies. Some of these patients may be reinduced into long lasting remissions through **infusion** of CD3+ lymphocytes from their original donor which induce a **graft**-versus-leukemia effect. Additional **infusion** of CD3+ donor cells can also be used to displace residual host T-lymphocytes in patients who only partially engraft with. . . lymphocytes may inhibit hematopoiesis, as in patients with aplastic anemia, and their displacement can allow for donor hematopoiesis to restore **blood** counts to normal values. Despite considerable experience in adults, there is very little information known about donor **leukocyte** infusions in children. Moreover, traditional donor **leukocyte** infusions in children (and in adults) have been limited by pancytopenia in about one third of patients; this is due. . . lymphocytes not only against host malignant cells but also against host normal hematopoietic cells. We therefore used G-CSF primed peripheral **blood** stem cell-enriched **leukocyte** infusions. These infusions contained CD3+ lymphocytes to provide a **graft**-versus-leukemia, and progenitor cells to restore donor hematopoisis and prevent pancytopenia. We report here our results in children in our bone. . . received this regimen for relapsed malignancy or for primary and/or secondary non-engraftment. We also review all reported literature on donor **leukocyte** infusions in children. Our experience and that of others indicate that donor **leukocyte** infusions should be considered for all children who relapse after bone marrow transplantation, especially in those with myeloid malignancies. Moreover, patients who exhibit suboptimal **graft** function early or late, should be considered for additional, measured doses of CD3+ lymphocytes from their original donors.
CT Medical Descriptors:
*bone marrow transplantation
*leukocyte
*hematopoietic stem cell transplantation
peripheral blood stem cell infusion
lymphocyte
antigen expression
graft versus leukemia effect
precursor cell
donor
hematopoiesis
pancytopenia: CO, complication
pancytopenia: PC, prevention
cancer recurrence: TH, therapy
childhood cancer: TH, therapy
review
medical literature
human
male
female
clinical article
controlled study

infant
child
adult
article
priority journal
granulocyte. . .

L15 ANSWER 8 OF 36 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V. on STN
TI From **leukocyte** reduction to **leukocyte transfusion**: The immunological effects of transfused leukocytes.
SO Bailliere's Best Practice and Research in Clinical Haematology, (**2000**) 13/4 (585-600).
Refs: 106
ISSN: 1521-6926 CODEN: BBPHFJ
AB In **transfusion** medicine, mononuclear leukocytes have been studied more often as contaminants of red **blood** cells or platelets responsible for adverse **transfusion** outcomes than as therapeutic cells; **leukocyte transfusion** has been effective in augmenting recipient immunity only in limited clinical situations. Studies in **leukocyte** reduction and **leukocyte transfusion** have progressed separately as if the leukocytes' adverse and therapeutic effects result from different immunological mechanisms. With growing clinical experience,. . . may be exploited for therapeutic benefit. Advances in clinical immunology, understanding of the variety of cells and functions in the **leukocyte** fraction of **blood**, and **blood** component preparation technology may lead to new ways of deriving immunological benefit from transfused **blood** leukocytes while minimizing their adverse effects. This chapter reviews the current uses of **leukocyte** reduction and mononuclear **leukocyte transfusion**, with an emphasis on the relationship between **transfusion**-associated **graft** -versus-host disease and donor lymphocyte **infusion** in controlling relapsed leukaemias.
CT Medical Descriptors:
***leukocyte transfusion**
*monocyte
*immunity
blood transfusion
leukocyte count
contamination
erythrocyte
thrombocyte
blood transfusion reaction: CO, complication
treatment outcome
clinical medicine
recipient
clinical immunology
cell function
cytology
review
graft versus host reaction: CO, complication
lymphocyte transfusion
cancer recurrence
leukemia: TH, therapy
human
nonhuman
mouse
animal experiment
animal model
controlled study
article
priority journal

L15 ANSWER 9 OF 36 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V. on STN

TI Donor **leukocyte** infusions for the treatment of leukemia relapse after allogeneic hematopoietic cell transplantation with myeloablative conditioning.

SO Turkish Journal of Haematology, (**2000**) 17/4 (171-181).
Refs: 40
ISSN: 1300-7777 CODEN: TJHSFS

AB . . . the donor seem to be effective and it has been understood that the success of the transplantation depends mainly on **graft** versus leukemia effect. Thirteen patients with leukemia (8 CML, 5 AML) who had relapsed after allogeneic hematopoietic cell transplantation (HCT) with myeloablative conditioning, have received donor **leukocyte** infusions (DLI). The median time between transplantation and relapse was 18 months (4-57 months). For CML patients who had cytogenetic. . . dose of 5 million units/m(2)/d for every consecutive days. Starting from the fifth week of this treatment, unprimed donor peripheral **blood** mononuclear cells were infused to the patients once a week for four weeks. IFN treatment was not cessated during these. . .

CT Medical Descriptors:
*leukemia: . . . reaction: SI, side effect
relapse: DT, drug therapy
relapse: TH, therapy
leukemia remission
cancer growth
treatment outcome
immune response
mononuclear cell
infection: CO, complication
infection: DT, drug therapy
infection: PC, prevention
lymphocyte transfusion
cytopenia: SI, side effect
chimera
disease course
article
recombinant alpha2b interferon: DT, drug therapy
recombinant alpha2b interferon: DO, drug dose
recombinant alpha2b interferon: AE, adverse. . .

L15 ANSWER 10 OF 36 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V. on STN

TI Variable **leukocyte** composition of red **blood** cell concentrates prepared in top-bottom systems: Possible implications for pre-transplant **blood transfusion**.

SO Vox Sanguinis, (**2000**) 79/2 (83-86).
Refs: 8
ISSN: 0042-9007 CODEN: VOSAAD

AB Background and Objectives: The beneficial effect of **blood transfusion** on kidney **graft** survival requires the presence of leukocytes in the transfusate, but a minimal dose has not been defined, nor has the role of individual **leukocyte** subsets been investigated. In the Netherlands, a standard pre-**transplant blood transfusion** consists of a buffy coat (BC)-depleted red **blood** cell concentrate (RBCC) containing a maximum of 1.2 x 109 residual leukocytes per unit. However, **leukocyte** subset composition is not standardized. Materials and Methods: Using FACS analysis, this study compared the residual **leukocyte** composition of RBCCs produced by Compomat.RTM. and Optipress.RTM., two currently used top-bottom systems. Results: While the total **leukocyte** content of the RBCCs was equivalent in both press types (0.5 x 109), the percentage of mononuclear cells (lymphocytes and. . . resulting in significantly higher numbers of transfused T cells, B cells, HLA-DR-positive cells, NK cells and stem cells. Conclusions: The **leukocyte** composition of a pre-**transplant blood transfusion** depends on the BC depletion method used; this might differentially affect the tolerizing or immunizing potential of a pre-

transplant blood transfusion. Copyright (C) 2000 S. Karger AG, Basel.

CT Medical Descriptors:
*erythrocyte concentrate
***erythrocyte transfusion**
leukocyte count
blood transfusion
fluorescence activated cell sorter
monocyte
B lymphocyte
T lymphocyte
natural killer cell
human
article
priority journal
HLA DR antigen: EC, endogenous compound

L15 ANSWER 11 OF 36 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V. on STN

TI Donor **leukocyte** infusions for recurrent hematologic malignancies after allogeneic bone marrow transplantation: Impact of infused and residual donor T cells.

SO Bone Marrow Transplantation, (**1998**) 22/11 (1057-1063).
Refs: 18
ISSN: 0268-3369 CODEN: BMTRE

AB We evaluated the efficacy and toxicity of different doses of donor T cells given with donor **leukocyte** infusions (DLI) as treatment for relapse of various hematologic malignancies after allogeneic bone marrow transplantation (BMT). We also studied whether. . . T cells/kg whereas patients with MM generally responded when they received .gtoreq. 10 x 107 T cells/kg. However, despite the **infusion** of high T cell doses (up to 32 x 107 T cells/kg), practically all patients with AL failed to respond. The likelihood of response was strongly related to the occurrence of **graft**-versus-host disease (GVHD) in patients with CML and MM (P = 0.0002), although GVHD was not helpful for patients with AL.. . .

CT Medical Descriptors:
***blood disease: TH, therapy**
*allogenic bone marrow transplantation
*leukapheresis
*t lymphocyte
chimera
chronic myeloid leukemia: TH, therapy
multiple myeloma: TH, therapy
acute leukemia: TH, therapy
leukemia remission
graft versus host. . .

L15 ANSWER 12 OF 36 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V. on STN

TI Efficacy of various **blood** bank filters for **leukocyte** depletion of red **blood** cell concentrates.

SO Infusionstherapie und Transfusionsmedizin, (**1998**) 25/5 (312-316).
Refs: 19
ISSN: 1019-8466 CODEN: IRANEE

AB Background: **Leukocyte** reduction is performed in order to omit and minimize, respectively, the adverse clinical effects such as alloimmunization, immunomodulation, disease transmission and **graft** -versus- host reactions. Material and Methods: **Leukocyte** depletion was performed on red **blood**-cell (RBC) concentrates with CPDA1 as the additive solution (CPDA1 RBC concentrates) as well as on RBC concentrates with Adsol as the additive solution (Adsol RBC concentrates) with the following **blood** bank filter systems: BPF 4 (FI), BIOR 01 Plus BBS (FII), and Sepacell RS 200B1 (FIII). **Leukocyte** counts were carried out prefiltration using an electronic particle counter, postfiltration with the manual Nageotte

cytometer and flow cytometry. Results: Higher **leukocyte** counts were measured with flow cytometry than with the manual Nageotte cytometer in each case. Markedly more leukocytes were found. . . which would encourage the use of Adsol as an additive. According to the guidelines set by the European Committee for **Blood Transfusion** Services an adequate **leukocyte** depletion (CILL (critical immunologic load of leukocytes) of < 5 x 106 for erythrocyte concentrates) was achieved with all three. . . showed the same results concerning the general tendency but not the absolute values which differed markedly. Conclusions: The heterogeneity of **leukocyte** depletion by the three filters in combination with the results of the repetition study stresses the need for clinical quality. . .

CT Medical Descriptors:
***blood bank**
***blood filter**
*leukopenia: TH, therapy
*erythrocyte concentrate
flow cytometry
leukocyte
cell population
alloimmunization
immunomodulation
graft versus host reaction
granulocyte
quality control
blood transfusion
human
human cell
article

L15 ANSWER 13 OF 36 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V. on STN
TI Donor **leukocyte infusion** for treatment of graft rejection post partially mismatched related donor bone marrow transplant.
SO Bone Marrow Transplantation, (**1998**) 22/1 (111-113).
Refs: 16
ISSN: 0268-3369 CODEN: BMTRE
AB **Graft** rejection following bone marrow transplantation is more common in patients who receive their grafts from alternative donors and whose marrow. . . hematopoietic recovery. We describe a patient with chronic myelogenous leukemia in accelerated phase who rejected a T cell-depleted bone marrow **graft**, 2 months following partially mismatched related donor bone marrow **transplant**. Unmanipulated peripheral **blood** donor **leukocyte infusion**, without additional chemotherapy or immunosuppressive therapy resulted in complete hematopoietic recovery. Cytogenetics and RFLP demonstrated hematopoietic donor chimerism. The patient did not develop **graft** -versus-host disease.
CT Medical Descriptors:
***leukocyte transfusion**
*graft rejection: CO, complication
*graft rejection: TH, therapy
*chronic myeloid leukemia: DT, drug therapy
*chronic myeloid leukemia: TH, therapy
bone marrow transplantation
t lymphocyte
host cell
hematopoiesis
cytogenetics
restriction. . .

L15 ANSWER 14 OF 36 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V. on STN
TI Testicular relapse of AML during chronic graft-versus-host disease induced by donor **leukocyte infusion**.
SO Haematologica, (**1996**) 81/4 (339-342).

Refs: 12
ISSN: 0390-6078 CODEN: HAEMAX

AB Treatment options for acute leukemia relapsing after allogeneic BMT include conventional chemotherapy or a second **transplant**; however, results are rather discouraging, the first option being associated with poor survival and the second with a high mortality rate. More recently, donor **leukocyte infusion** (DLI) from the original donor has been used for relapsed patients in an attempt to induce a **graft**-versus-leukemia (GVL) effect. This procedure is partially devoid of the toxicity inherent to a second BMT. At our Institution, a 36-year-old patient with biphenotypic AML in second complete remission after relapse following allogeneic BMT was treated with peripheral **blood** stem cell (PBSC)-enriched donor leukocytes, obtained after in vivo priming with rhG-CSF. The patient experienced extensive cGVHD but developed a. . .

L15 ANSWER 15 OF 36 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V. on STN

TI Distinct circulation patterns in peripheral **blood** of **leukocyte** subpopulations during the first 24 hours following autologous bone marrow transplantation.

SO Journal of Hematotherapy, (**1996**) 5/6 (647-654).
Refs: 22
ISSN: 1061-6128 CODEN: JOEMEL

AB We have studied the recirculation patterns of **leukocyte** subpopulations during the first 24 h at 5 min before and 5, 15, 180, and 1440 min after autologous bone. . . and measurements of myeloid progenitors (CFU-GM). Although the great majority of the injected cell populations were undetectable 5 min after **graft infusion**, the number of CD3+ T lymphocytes increased at 5 and 15 min and again at 24 h post-ABMT. In contrast,. . . practically absent before ABMT but were clearly detectable in 12 of 14 patients throughout the observation period. We conclude that **leukocyte** subsets exhibit different recirculation patterns after ABMT, and in light of the increased knowledge about **leukocyte**- endothelial interactions, these data could provide a platform for attempts to control **leukocyte** recirculation during stem cell **infusion**.

L15 ANSWER 16 OF 36 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V. on STN

TI Donor **leukocyte** transfusions and discontinuation of immunosuppressants to achieve an initial remission after allogeneic bone marrow transplantation in a patient with primary. . .

SO Bone Marrow Transplantation, (**1996**) 18/1 (257-259).
ISSN: 0268-3369 CODEN: BMTRE

AB . . . an allogeneic bone marrow transplantation for primary refractory Philadelphia-positive acute biphenotypic leukemia. Since leukemic blasts were persistently present in peripheral **blood** and bone marrow, in spite of the evidence for engraftment of male donor hematopoiesis, we performed donor **leukocyte** transfusions and discontinued immunosuppression. An initial complete remission was obtained 15 weeks after allogeneic bone marrow transplantation, and lasted for. . . weeks. We concluded that the prominent mechanism for the eradication of the refractory leukemic clone in the patient was the **graft**-versus-leukemia effect.

CT Medical Descriptors:
*acute leukemia: TH, therapy
*allogenic bone marrow transplantation
***leukocyte transfusion**
adult
article
case report
drug withdrawal
female
hematopoiesis
human

priority journal
remission
*immunosuppressive agent

L15 ANSWER 17 OF 36 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V. on STN
TI Lymphocytosis of donor origin in cerebrospinal fluid, and marrow aplasia after donor **leukocyte infusion** for EBV-lymphoproliferative disease.
SO Bone Marrow Transplantation, (**1996**) 18/1 (221-224).
ISSN: 0268-3369 CODEN: BMTRE
AB A 29-year-old woman underwent a T cell-depleted unrelated donor **transplant** for CML in chronic phase. Sixty-three days after marrow **infusion**, the patient developed fevers and generalized lymphadenopathy. Lymph node biopsy was consistent with monoclonal EBV-associated immunoblastic **lymphoma** for which the patient received 105 CD3-positive donor leukocytes per kilogram. Six days after **leukocyte infusion** the patient developed mental status changes without focal neurological deficit. MRI revealed no mass lesions. Cerebral spinal fluid revealed a white **blood** cell count of 1650 cells/mm3 which were shown to be T lymphocytes of donor origin. The CSF was tested and. . . mental status changes resolved without specific intervention. Subsequently she developed marrow aplasia, which was believed to be secondary to the **infusion** of donor leukocytes. Possible mechanisms for these two previously unreported side-effects of donor **leukocyte infusion** are discussed.
CT Medical Descriptors:
*bone marrow aplasia: CO, complication
*cerebrospinal fluid
***leukocyte transfusion**
*lymphocytosis: ET, etiology
*lymphocytosis: CO, complication
*lymphoproliferative disease: TH, therapy
*lymphoproliferative disease: ET, etiology
adult
article
case report
chronic myeloid leukemia: TH, therapy
epstein barr virus
female
fever: CO, complication
human
leukocyte. . .

L15 ANSWER 18 OF 36 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V. on STN
TI [**Leukocyte** depletion of **blood** products. Indications and technical execution].
LEUKOZYTENDEPLETION VON BLUTPRODUKTEN. INDIKATIONEN UND TECHNISCHE DURCHFUHRUNG.
SO Fortschritte der Medizin, (**1995**) 113/8 (46+49-50).
ISSN: 0015-8178 CODEN: FMDZAR
AB Leukocytes contaminating donated **blood** are considered to be responsible for many of the side effects associated with **blood** transfusions. These include HLA sensitization and its sequelae, as well as **graft** versus host reaction, transmission of CMV. The present article summarizes the indications for **leukocyte** depletion and its technical execution.
CT Medical Descriptors:
***blood transfusion**
*leukocyte
*lymphocyte depletion
HLA system
cytomegalovirus
graft versus host reaction
human

safety
short survey
virus transmission
***blood**

L15 ANSWER 19 OF 36 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V. on STN
TI **Leukocyte**-reduced transfusions of ABO-identical platelets and clinical outcome in autologous bone marrow transplantation.
SO Bone Marrow Transplantation, (**1994**) 14/6 (943-948).
ISSN: 0268-3369 CODEN: BMTRE
AB In observational studies, use of ABO-identical platelets and **leukocyte**-reduced **blood** components have been associated with prolonged survival and reduced morbidity in acute leukemia. We present an analysis of the clinical results of instituting a policy of ABO-identical, leukoreduced transfusions in adult patients with **lymphoma** undergoing autologous bone marrow transplantation. Consecutive patients with Hodgkin's disease or non-Hodgkin's **lymphoma** were treated with a BEAC conditioning regimen. The use of ABO-identical platelets and leukoreduction of **blood** components was associated with reductions in mean number of days with fever .gtoreq. 38.5.degree.C (17 vs 10), number of days. . . in morbidity were not explained by variations in supportive care such as use of hematopoietic growth factors, use of peripheral **blood** stem cells or by any measures of pretransplant disease extent or severity. While conclusions based on cohort studies must be. . . clinical studies. ABO-identical platelet transfusions and leukoreduction are associated with reduced morbidity in patients undergoing autologous bone marrow transplantation for **lymphoma**.
CT Medical Descriptors:
*autologous bone marrow transplantation
***blood group ABO system**
*hodgkin disease: DT, drug therapy
*hodgkin disease: SU, surgery
*hodgkin disease: TH, therapy
*nonhodgkin lymphoma: TH, therapy
*nonhodgkin lymphoma: SU, surgery
*nonhodgkin lymphoma: DT, drug therapy
***thrombocyte transfusion**
acute leukemia: TH, therapy
adult
article
clinical article
cohort analysis
controlled study
data analysis
female
fever: DT, drug therapy
human
human cell
leukocyte
leukocyte count
male
morbidity
neutrophil
priority journal
survival
virus infection: PC, prevention
virus infection: DT, drug. . .

L15 ANSWER 20 OF 36 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V. on STN
TI Intact survival with **transfusion**-associated graft-versus-host disease proved by human **leukocyte** antigen typing of lymphocytes in skin biopsy specimens.
SO Journal of Pediatrics, (**1995**) 126/1 (61-64).

ISSN: 0022-3476 CODEN: JOPDAB

AB A transient **transfusion**-associated **graft**-versus-host disease occurred in a premature infant of 30 weeks of gestation. We demonstrated donor lymphocytes in a skin biopsy specimen with a two-step immunoperoxidase technique using monoclonal antibodies against human **leukocyte** antigen determinants specific for the donor. The girl survived and is immunocompetent.

CT Medical Descriptors:
*HLA typing
***blood transfusion**
*graft versus host reaction: DI, diagnosis
article
case report
human
human tissue
immunofluorescence
lymphocyte
newborn
prematurity
priority journal
skin biopsy
survival

L15 ANSWER 21 OF 36 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V. on STN

TI Relapse of chronic myeloid leukemia after allogeneic bone marrow transplant: The case for giving donor **leukocyte** transfusions before the onset of hematologic relapse.

SO Blood, (**1994**) 83/11 (3377-3383).
ISSN: 0006-4971 CODEN: BLOOAW

AB Fourteen patients with chronic myeloid leukemia (CML) relapsing after allogeneic bone marrow **transplant** (BMT) were treated with **leukocyte** transfusions from the original marrow donor (sibling, n = 9; volunteer unrelated, n = 5). The relapse was defined at. . . no responder has shown sign of relapse. Reversible marrow aplasia occurred in two patients, both treated in hematologic relapse. Severe **graft** -versus-host disease occurred in four patients and was fatal in one. We confirm previous reports that donor **leukocyte** transfusions are effective in the management of CML in relapse after BMT. In this series, therapeutic intervention before the onset. . .

CT Medical Descriptors:
*allogenic bone marrow transplantation
*cancer recurrence
*chronic myeloid leukemia: SU, surgery
adult
article
blood transfusion
bone marrow aplasia
clinical article
cytogenetics
graft versus host reaction: CO, complication
human
polymerase chain reaction
priority journal

L15 ANSWER 22 OF 36 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V. on STN

TI **Leukocyte** reduction of cellular **blood** components: Effectiveness, benefits, quality control, and costs.

SO Archives of Pathology and Laboratory Medicine, (**1994**) 118/4 (392-404).
ISSN: 0003-9985 CODEN: ARPAAQ

AB Cellular **blood** components contain passenger donor leukocytes. **Transfusion** of passenger leukocytes may be associated with alloimmunization to **leukocyte** antigens, febrile **transfusion** reactions, refractoriness to platelet

transfusion, severe pulmonary dysfunction, **graft**-vs-host disease, the transmission of infectious diseases, and immune modulation. Advanced **leukocyte**-reduction filters enable the removal of up to 99.9% of leukocytes from cellular **blood** components. Clinical trials suggest that the use of **leukocyte**-reduction filters may prevent or diminish the probability of febrile **transfusion** reactions, alloimmunization, and cytomegalovirus infection, but controversy exists regarding the effectiveness of **leukocyte** reduction in preventing immune modulation. There is no evidence that available techniques will prevent **graft**-vs-host disease. Cost-benefit analyses support the use of **leukocyte**-reduction filters for well-defined indications. Standards for **leukocyte** reduction of red **blood** cells have been defined, but issues regarding the quality control of **leukocyte**-reduced **blood** components require additional study.

CT Medical Descriptors:
***erythrocyte transfusion**
*leukapheresis
***thrombocyte transfusion**
alloimmunization
blood filtration
blood transfusion reaction: CO, complication
conference paper
cost benefit analysis
cytomegalovirus infection
fever: CO, complication
graft versus host reaction
immunoregulation
quality control
HLA antigen: EC, endogenous compound

L15 ANSWER 23 OF 36 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V. on STN

TI .gamma.-Irradiation of pretransplant **blood** transfusions from unrelated donors prevents sensitization to minor histocompatibility antigens on dog **leukocyte** antigen-identical canine marrow grafts.

SO Transplantation, (**1994**) 57/3 (423-426).
ISSN: 0041-1337 CODEN: TRPLAU

AB Pretransplant **blood** transfusions from a dog **leukocyte** antigen (DLA)- identical canine littermate marrow donor will sensitize the recipient to non- DLA-linked polymorphic minor histocompatibility antigens, which uniformly results in **graft** rejection. We observed previously that 2000 cGy .gamma.- irradiation of marrow donor **blood** transfusions prevented this sensitization and subsequent marrow **graft** rejection. The purpose of the present study was to determine whether treatment of unrelated **blood** transfusions with .gamma.- irradiation would also prevent sensitization. Conceivably, sensitization to minor histocompatibility antigens might be more efficient or potent. . . . context of disparity for DLA antigens. Furthermore, this model, in which sensitization to DLA-identical littermate marrow is caused by unrelated **blood** transfusions, is directly relevant to the clinical circumstances of human marrow transplantation. We assessed sensitization caused by unrelated **blood** transfusions by monitoring **graft** outcome in recipients transplanted with DLA-identical littermate marrow after conditioning with 920 cGy total body irradiation. Two thousand cGy .gamma.-irradiation of unrelated **blood** transfusions significantly reduced the incidence of **transfusion**-induced sensitization of recipients. There was successful marrow engraftment in 15 of 16 (94%, P<0.003) of these animals in contrast to the previous study in which only 7 of 16 (44%) animals engrafted after they were transfused with unmodified **blood** on the same schedule. These results suggest that **blood** transfusions for use in humans, especially for patients with aplastic anemia, should be .gamma.- irradiated in order to reduce the incidence of marrow

graft rejection caused by sensitization to minor histocompatibility antigens.

CT Medical Descriptors:
***blood transfusion**
*bone marrow transplantation
*gamma irradiation
*graft versus host reaction: PC, prevention
*graft versus host reaction: CO, complication
animal experiment
animal model
animal tissue
aplastic anemia
article
dog
nonhuman
priority journal
sensitization
whole body. . .

L15 ANSWER 24 OF 36 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V. on STN
TI Mediators of **leukocyte** activation play a role in disseminated intravascular coagulation during orthotopic liver transplantation.
SO Transplantation, (**1994**) 57/3 (354-358).
ISSN: 0041-1337 CODEN: TRPLAU
AB . . . In the reperfusion phase of OLT a DIC-like situation has been described and has been held responsible for the high **blood** loss during this phase. We investigated the role of leukocytes in the pathogenesis of DIC in OLT by measuring the. . . (cathepsin B, elastase, TNF, neopterin) and the levels of thrombin-anti-thrombin III (TAT) complexes, seen as markers of prothrombin activation. Arterial **blood** samples were taken at 10 different time points during and after OLT. Samples were also taken of the perfusate released from the liver **graft** vein during the flushing procedure before the reperfusion phase. Aprotinin was given as a continuous **infusion** (0.2-0.4 Mill. KIU/hr) and its plasma levels were determined. Significantly elevated levels of neopterin (15-fold; P<0.01), cathepsin B (440-fold; P<0.01). . . systemic circulation, as well as their significant increases in the early reperfusion phase suggested that they were released by the **graft** liver. This was paralleled by elevated levels of elastase (1.3- fold, P<0.05), TNF (1.5-fold, P=NS), and TAT complexes (1.4-fold; P<0.1) in the perfusate. Significant correlations could be identified between the parameters of **leukocyte** activation and TAT complexes, whereas no correlation was observed between any of the parameters investigated and the aprotinin levels. Our results strongly indicate a release of leukocytic mediators from the **graft** liver during its reperfusion which seems to be related to the parallel increased prothrombin activation. No correlation could be seen. . .

CT Medical Descriptors:
*disseminated intravascular clotting: CO, complication
*leukocyte activation
*liver transplantation
article
bleeding: CO, complication
clinical article
correlation function
female
human
male
pathogenesis
priority journal
protein blood level
reperfusion
aprotinin
cathepsin b: EC, endogenous compound

elastase: EC, endogenous compound
neopterin: EC, endogenous compound
prothrombin: EC, endogenous compound
thrombin: EC, endogenous compound
thrombocyte antibody:. . .

L15 ANSWER 25 OF 36 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V. on STN
TI **Leukocyte** reduction filtration: Technologies, benefits, applications, and limitations.
SO Laboratory Medicine, (**1994**) 25/2 (96-101).
ISSN: 0007-5027 CODEN: LBMEBX
AB Recent developments in **leukocyte** reduction (LR) filtration technology are reviewed. Maturing over the past decade, these filter devices are very effective, easy, and safe. . . Although guidelines for use or recommendations for specific clinical indications remain incompletely resolved, some promising applications eg, delay/prevention of white **blood** cell (WBC) alloimmunization and platelet refractoriness or cytomegalovirus 'safe' components are being investigated by multicenter trials, LR filtration would logically benefit patients who require prolonged or chronic **transfusion** support and those with recurrent febrile nonhemolytic **transfusion** reactions associated with WBC alloimmunization. At this time, LR filtration is recommended neither for all **blood** recipients nor to prevent **transfusion**- associated (TA) **graft** -versus-host disease or TA immunomodulation.
CT Medical Descriptors:
*alloimmunity
***blood filtration**
***leukocyte transfusion**
blood bank
blood storage
blood transfusion reaction: ET, etiology
blood transfusion reaction: PC, prevention
clinical trial
cytomegalovirus
graft versus host reaction: ET, etiology
graft versus host reaction: PC, prevention
human
immunomodulation
multicenter study
review
technology
virus transmission
*HLA antigen: EC,. . .

L15 ANSWER 26 OF 36 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V. on STN
TI Salvage immunotherapy using donor **leukocyte** infusions as treatment for relapsed chronic myelogenous leukemia after allogeneic bone marrow transplantation: Efficacy and toxicity of a defined T-cell. . .
SO Blood, (**1993**) 82/8 (2310-2318).
ISSN: 0006-4971 CODEN: BLOOAW
AB . . . patients who had hematologic relapse of chronic myelogenous leukemia (CML) after undergoing allogeneic bone marrow transplantation (BMT) were treated with **leukocyte** infusions from the original bone marrow donors. All patients had previously received marrow grafts from HLA-identical siblings. Six patients were. . . 5.0 x 108 T cells/kg. Three patients also received short courses of therapy with .alpha. interferon to control elevated white **blood** cell counts within the first several weeks after **leukocyte** transfusions. Seven of eight evaluable patients developed **graft**-versus-host disease (GVHD) at a median of 32 days after the initial **infusion** . One patient had fatal GVHD. A second patient had grade 3 acute GVHD, which has responded to immunosuppressive therapy. The. . . all had mild grade I GVHD. Six patients continue to require modest doses of prednisone

more than 6 months after **infusion**. Four patients developed marrow aplasia, which in three patients required marrow boosts from the original donors. Two of these three patients have normal hematopoietic function, whereas the third patient remains growth factor and **transfusion** dependent. Both patients treated in blast crisis have died, one from GVHD and one from disease progression. All six patients in the accelerated phase are alive and in cytogenetic remission at a median of 42 weeks after **infusion**. Five of these six patients are in molecular remission. This study demonstrates that **leukocyte** infusions that administered a defined T-cell dose can exert a profound **graft**-versus-leukemia effect and are an effective form of salvage immunotherapy in allogeneic marrow **transplant** recipients. This therapeutic approach appears to be a viable alternative to existing chemotherapeutic and immunomodulatory strategies for the treatment of. .

CT Medical Descriptors:
*cancer immunotherapy
*chronic myeloid leukemia: TH, therapy
adult
allogenic bone marrow transplantation
article
bone marrow aplasia
cancer recurrence
clinical article
graft versus host reaction: CO, complication
human
human cell
leukocyte transfusion
multimodality cancer therapy
priority journal
t lymphocyte
alpha interferon

L15 ANSWER 27 OF 36 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V. on STN
TI Molecular remission occurring after donor **leukocyte** infusions for the treatment of relapsed chronic myelogenous leukemia after allogeneic bone marrow transplantation.
SO Bone Marrow Transplantation, (**1992**) 10/3 (301-304).
ISSN: 0268-3369 CODEN: BMTRE
AB Donor **leukocyte** infusions were administered to a patient who had relapsed with chronic myelogenous leukemia after having failed two successive HLA-matched allogeneic bone marrow transplants. Serial cytogenetic, restriction fragment length polymorphism, and polymerase chain reaction studies of the patient's marrow and **blood** after receiving donor **leukocyte** infusions revealed disappearance of the leukemic clone and the establishment of complete donor chimerism. An antileukemic response in this patient occurred initially in the absence of clinically evident **graft**-versus-host disease (GVHD), but complete eradication of the leukemic clone did not occur until after the onset of GVHD. The patient is now 48 weeks post **infusion** and remains in complete remission. This case demonstrates that **leukocyte** infusions are an effective form of adoptive immunotherapy which can result in a sustained molecular remission.
CT Medical Descriptors:
*allogenic bone marrow transplantation
*chronic myeloid leukemia: SU, surgery
*chronic myeloid leukemia: TH, therapy
***infusion**
*leukocyte
adult
article
blood
bone marrow
case report

chimera
chromosome analysis
donor
female
graft versus host reaction
human
human cell
leukemia remission
polymerase chain reaction
restriction fragment length polymorphism

L15 ANSWER 28 OF 36 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V. on STN
TI **Leukocyte**-depleted reperfusion of transplanted human hearts prevents ultrastructural evidence of reperfusion injury.
SO Journal of Surgical Research, (**1992**) 52/4 (298-308).
ISSN: 0022-4804 CODEN: JSGRA2
AB The present study examines whether **leukocyte** depletion can prevent postreperfusion ultrastructural injury in transplanted human hearts. Thirty- two patients undergoing orthotopic cardiac transplantation were randomized to receive either enriched, warm, whole **blood** (Group I; n = 16) or enriched, warm, **leukocyte**-depleted **blood** (Group II; n = 16) reperfusion. Donor hearts were arrested with 1 liter of 4.degree.C crystalloid cardioplegia and topically cooled.. . . Group II showed minimal changes with a grade of 1.33 .+-. 0.09, P < 0.0001 in comparison to Group I **Leukocyte**-depleted reperfusion of human transplanted hearts prevents ultrastructural injury. This may allow safe extension of the ischemic period and result in improved **graft** function.
CT Medical Descriptors:
*heart muscle reperfusion
*heart transplantation
*reperfusion injury: ET, etiology
*reperfusion injury: TH, therapy
*reperfusion injury: PC, prevention
adult
blood flow velocity
blood transfusion
cell damage
cell metabolism
cell ultrastructure
clinical article
conference paper
controlled study
graft survival
heart muscle biopsy
heart muscle ischemia: ET, etiology
heart muscle ischemia: PC, prevention
human
human cell
human tissue
leukocyte. . .

L15 ANSWER 29 OF 36 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V. on STN
TI Evaluation of the effects of cyclosporine and HLA-typed source **leukocyte** transfusions (apheresis by-products) on the immune systems of highly sensitized prospective renal allograft recipients.
SO Transplantation Proceedings, (**1987**) 19/1 I (735-737).
CODEN: TRPPA8
AB The expanding numbers of highly sensitized prospective renal **transplant** recipients waiting on **transplant** lists continues to be a major problem. Due to their high levels of circulating antibody, these patients remain essentially untransplantable.. . . of our protocol is to determine whether cyclosporine alone, or in combination with the antigenic load of HLA typed source **leukocyte**

transfusions can cause a progressive reduction of peripheral reactive cytotoxic antibody in highly sensitized patients. This report will detail our. . .

CT Medical Descriptors:
*HLA system
***drug blood level**
*drug determination
*drug efficacy
*drug interaction
*drug monitoring
*kidney allograft
***leukocyte transfusion**
*drug therapy
*sensitization
kidney allograft rejection
blood and hemopoietic system
kidney
lymphatic system
priority journal
drug analysis
therapy
intravenous drug administration
oral drug administration
methodology
human
clinical article
*cyclosporin
*cytotoxic antibody
*cyclosporin a

L15 ANSWER 30 OF 36 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V. on STN

TI A randomized study comparing **leukocyte**-depleted versus packed red cell transfusions in prospective cadaver renal allograft recipients.

SO Transfusion, (**1985**) 25/2 (116-119).
CODEN: TRANAT

AB A prospective randomized study at a single renal **transplant** center between 1980 and 1982 compared the influence of **leukocyte**-depleted versus packed red cell pretransplantation **blood** transfusions on patient sensitization to **leukocyte** (HLA) antigens, likelihood of receiving a **graft**, and eventual transplantation results. All consenting potential cadaver renal **transplant** recipients (n = 107) were randomly assigned to receive transfusions at 6-week intervals with either packed red cells (Group 1) or **leukocyte**-poor red cells (Group 2) until they were transplanted. Actuarial **graft** and patient survival were identical for **graft** recipients in both groups. Although the likelihood of receiving a **graft** was associated with the level of pretransplant sensitization to **leukocyte** (HLA) antigens ($p < 0.02$) as measured by the percent of panel reactive antibody (PRA), it was not associated with the type of **blood** used. The highest mean peak reactive PRA level for all patients showed a low but significant increase (29 .+-. 4 versus 43 .+-. 5%; $p < 0.0005$) following entry into the **transfusion** protocol, but the rate of increase was the same for patients in both treatment groups. The likelihood of receiving a **transplant** was primarily associated with a history of prior **graft** rejection ($p < 0.05$), and patients with prior **graft** loss had the greatest increase in sensitization following entry into the **transfusion** protocol. These findings indicate that using **leukocyte**-poor red cells for pretransplant transfusions provided no added benefit when compared with packed red cells in terms of patient sensitization, the likelihood of receiving a **transplant**, or eventual **graft** survival.

CT Medical Descriptors:
***blood transfusion**

*kidney transplantation
*sensitization
cadaver kidney
leukocyte
priority journal
blood and hemopoietic system
kidney
human
peripheral vascular system
major clinical study
*HLA antigen

L15 ANSWER 31 OF 36 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V. on STN
TI Role of regular and **leukocyte**-free **blood** transfusions in the generation of broad sensitization.
SO Transplantation, (**1984**) 38/6 (594-598).
CODEN: TRPLAU
AB The factors associated with the development of humoral sensitization were studied prospectively in 30 previously transplanted patients immediately after **graft** rejection. Lymphocyte antibodies were measured both by conventional cytotoxicity in 30 panel cells and by flow cytometry in up to 10 target cells. Although lymphocyte antibodies induced by **graft** rejection alone were detected in 12 of 26 patients (46%), lymphocytotoxic antibodies were present in only 2 of 27 patients.. . . 25 patients without lymphocytotoxic antibodies, 13 developed them later. In all cases panel antibody reactivity developed after the patients received **blood** transfusions. No other factor was associated with the development of lymphocytotoxic antibodies, including **transplant** nephrectomy. There were 12 patients who remained negative for lymphocytotoxic antibodies even though 5 of them were transfused. The powerful role of **blood** transfusions in the generation of broad sensitization was further documented in 5 patients who received **blood** units completely depleted of leukocytes by cottonwool filtration and red cell washing. Four of these patients showed significant increases in the level of lymphocytotoxic antibodies, even when stored **blood** units were used. One additional patient became broadly sensitized by the **transfusion** of frozen **blood**. These results show (A) that broad sensitization may not develop if patients are not transfused after **graft** rejection; (B) that **blood** transfusions lead to broad sensitization in most (76%) pretransplanted patients; and (C) that **transfusion** of **leukocyte**-free **blood** may delay, but not avoid, the development of broad sensitization.
CT Medical Descriptors:
***blood transfusion**
*sensitization
kidney transplantation
blood and hemopoietic system
priority journal
kidney
human
etiology
therapy
clinical article
*lymphocyte antibody

L15 ANSWER 32 OF 36 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V. on STN
TI Studies of the response in mixed **leukocyte** culture of cells from patients with aplastic anemia to cells from HLA-identical siblings.
SO Transplantation, (**1981**) 32/2 (90-95).
CODEN: TRPLAU
AB We have studied the mixed **leukocyte** culture (MLC) reactions of 64 patients with severe aplastic anemia. Their peripheral **blood** mononuclear cells showed an increased relative response (RR) to cells from

HLA-identified siblings as compared to cells from normal HLA-identical. . . patients receiving marrow grafts from HLA-identical sibling donors, those with elevated RRs before transplantation were more apt to reject the **transplant** than those without (P<0.0001). There was no elevation of the RR in 10 untransfused patients, although positive RRs were noted. . . of their first transfusions. Five patients with identical twins were also tested, and elevated RRs were noted in three. Although **blood transfusion** appears to be responsible for the increased RRs observed in some aplastic patients, genetic differences between donor and recipient were. . .

CT Medical Descriptors:
*HLA system
*aplastic anemia
***blood transfusion**
*mixed leukocyte culture
bone marrow transplantation
sibling
in vitro study
heredity
major clinical study
blood and hemopoietic system
lymphatic system

L15 ANSWER 33 OF 36 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V. on STN

TI Effect of high-dose methylprednisolone **infusion** on polymorphonuclear **leukocyte** function in patients with systemic lupus erythematosus.

SO Arthritis and Rheumatism, (**1981**) 24/5 (641-647).
CODEN: ARHEAW

AB We have studied the effect of high-dose (1 gm) methylprednisolone **infusion** on polymorphonuclear **leukocyte** (PMN) function in 11 patients with active systemic **lupus** erythematosus (SLE). The only alteration of polymorphonuclear **leukocyte** function produced consistently by methylprednisolone was decreased adherence to plastic surfaces when tested 2 hours after **infusion**. This steroid-induced abnormality, however, was transient. Cells obtained from patients 24 hours after a single dose of drug exhibited normal. . . These results indicate that single, large doses of methylprednisolone do not produce long-lasting abormalities of PMN function in patients with **lupus**.

CT Medical Descriptors:
*leukocyte function defect
*neutrophil
*systemic lupus erythematosus
drug dose
blood and hemopoietic system
intravenous drug administration
major clinical study
therapy
joint
*methylprednisolone
*prednisone
cytochalasin b

L15 ANSWER 34 OF 36 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V. on STN

TI [Methodological and clinical problems of **leukocyte** transfusions].
DIE METHODISCHE UND KLINISCHE PROBLEMATIK DER LEUKOZYTEN **TRANSFUSION**.

SO Deutsche Medizinische Wochenschrift, (**1975**) 100/15 (839-844).
CODEN: DMWOAX

AB . . . acute leukemia. Correspondingly there has been an increase in the percentage of patients with serious infectious complications. Only recently have **leukocyte** concentrates been available in some

centers in an attempt to reduce these infectious complications. Several models of **blood** cell separators, based on the centrifugal principle, are available. With these devices approximately 1-2 x 1010 granulocytes can be harvested. . . shown these cells to function essentially normally. It has been shown that HLA identical leukocytes have the best survival following **transfusion**. In addition, however, it is important to test for leukoagglutination of donor leukocytes with recipient serum. Since the availability of **leukocyte** transfusions is presently limited, they should be used in those situations where they have been shown to be most beneficial.. . . potentially reversible or treatable disease including acute drug induced neutropenia, and marrow suppression during treatment of acute leukemia and malignant **lymphoma**. Studies performed thus far have suggested a beneficial effect of granulocyte transfusions. However, only planned, prospective and preferably randomized studies. . .

CT Medical Descriptors:
*HLA system
*cancer
*immunology
*internal medicine
*leukocyte
***leukocyte transfusion**
*drug therapy
methodology
major clinical study
therapy
intravenous drug administration

L15 ANSWER 35 OF 36 SCISEARCH COPYRIGHT 2003 THOMSON ISI on STN
TI WHY USE **LEUKOCYTE**-POOR **BLOOD** COMPONENTS IN 1995
SO TRANSFUSION CLINIQUE ET BIOLOGIQUE, (**1996**) Vol. 3, No. 1, pp. 57-74.
ISSN: 1246-7820.

AB During the last 15 years, the techniques to prepare **leukocyte** -poor cellular **blood** components greatly improved, as well as our knowledge about the role of leukocytes in many adverse effects of **transfusion**. These two facts favor the extension of indication of **leukocyte**-poor **blood** components.

Leukocytes in **blood** components may be detrimental to their storage, due to their metabolic needs and to their progressive lysis, leading to the release of cytokines.

Leukocytes are the exclusive vector in **blood** of CMV and HTLV viruses.

Leukocytes are a key element of the immune modifications induced by **transfusion**. HLA alloimmunization is favored by the **transfusion** of large quantities of leukocytes HLA different from the recipient whose immune functions are intact. Conversely, the risk of **transfusion** associated **graft** versus host disease is dependent of the **transfusion** of mature T lymphocytes sharing a partial identity with the recipient, and/or an immune deficient status of the recipient. Between these two extremes, many other effects related to the presence of leukocytes in cellular **blood** components, as are the **transfusion** effect observed in **transplant** recipients, the increased risk for bacterial infection after **transfusion**, the increased risk for turner recurrence or the reactivation of virus infections, remain to be fully understood.

Despite recent significant improvements, further studies, experimental as well as clinical, will be needed to expand the indications of **leukocyte**-poor **blood** components.

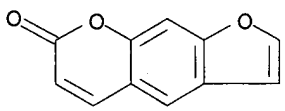
ST Author Keywords: **BLOOD** COMPONENTS; LEUKOCYTE-POOR IMMUNE MODULATION BY **TRANSFUSION**
STP KeyWords Plus (R): FEBRILE **TRANSFUSION** REACTIONS; CYTOMEGALO-VIRUS INFECTION; WHITE CELL-REDUCTION; VERSUS-HOST DISEASE; COLORECTAL-CANCER RECURRENCE; HUMAN-IMMUNODEFICIENCY-VIRUS; BONE-MARROW

TRANSPLANTATION; YERSINIA-ENTEROCOLITICA; RED-CELLS; RANDOMIZED TRIAL

L15 ANSWER 36 OF 36 TOXCENTER COPYRIGHT 2003 ACS on STN
TI Graft-versus-tumor induction with donor **leukocyte** infusions as primary therapy for patients with malignancies
SO JOURNAL OF CLINICAL ONCOLOGY, (**1999 Apr**) 17 (4) 1234.
Journal Code: 8309333. ISSN: 0732-183X.
AB PURPOSE: Histocompatible allogeneic donor **leukocyte** infusions (DLIs) were administered as primary cancer therapy in a phase I trial to determine (1) whether mixed chimerism could be detected without a prior allogeneic transplantation, (2) the toxicity of primary DLI, and (3) whether a **graft**-versus-tumor (GVT) reaction could be observed. PATIENTS AND METHODS: Eighteen patients were studied. Patients received interferon alfa-2b for a minimum of. . . was determined using polymerase chain reaction amplification of donor and host-specific DNA polymorphisms. RESULTS: Donor cells were detected in the **blood** in 14 of 16 assessable patients within 1 hour of DLI. Chimerism detectable 4 weeks after DLI was observed in four patients, and five patients were not assessable. Prior autologous transplantation was associated with late chimerism (P =.0014). Acute **graft** -versus-host disease (GVHD) occurred in four of 16 assessable patients (grade 1, two patients; grade 2, one patient; grade 4, one. . .
CT . . .
Graft vs Host Disease: IM, immunology
*Graft vs Tumor Effect: IM, immunology
Immunotherapy, Adoptive
Interferon Alfa-2b: TU, therapeutic use
*Leukocyte **Transfusion**
Middle Age
Neoplasms: IM, immunology
*Neoplasms: TH, therapy
Polymerase Chain Reaction
Remission Induction
Tissue Donors
Transplantation, Homologous
Treatment Outcome

=>

L1 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS on STN
RN 66-97-7 REGISTRY
CN 7H-Furo[3,2-g][1]benzopyran-7-one (8CI, 9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Furocoumarin (6CI)
OTHER NAMES:
CN 2-Propenoic acid, 3-(6-hydroxy-5-benzofuranyl)-, .delta.-lactone
CN 6,7-Furanocoumarin
CN Ficusin
CN Furo[2',3':7,6]coumarin
CN Furo[4',5':6,7]coumarin
CN NSC 404562
CN **Psoralen**
CN Psoralene
FS 3D CONCORD
MF C11 H6 O3
CI COM
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, DDFU, DRUGU, EMBASE, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, NAPRALERT, NIOSHTIC, PROMT, RTECS*, SPECINFO, TOXCENTER, USPAT2, USPATFULL
(*File contains numerically searchable property data)
Other Sources: EINECS**
(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1933 REFERENCES IN FILE CA (1937 TO DATE)
575 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
1934 REFERENCES IN FILE CAPLUS (1937 TO DATE)
31 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L16 ANSWER 51 OF 51 USPATFULL on STN
AN 89:38952 USPATFULL
TI Purified hemoglobin solutions and method for making same
IN Estep, Timothy N., Lindenhurst, IL, United States
PA Baxter International Inc., Deerfield, IL, United States (U.S. corporation)
PI US 4831012 19890516 <--
AI US 1988-151842 19880203 (7)
RLI Continuation-in-part of Ser. No. US 1985-747477, filed on 21 Jun 1985, now abandoned And a continuation-in-part of Ser. No. US 1984-592633, filed on 23 Mar 1984, now abandoned
DT Utility
FS Granted
EXNAM Primary Examiner: Rosen, Sam
LREP Flattery, Paul C., Hunter, Marjorie D., Bates, Sarah E.
CLMN Number of Claims: 38
ECL Exemplary Claim: 1
DRWN 3 Drawing Figure(s); 2 Drawing Page(s)
LN.CNT 1101
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
PI US 4831012 19890516 <--
SUMM Another problem associated with the **infusion** of **blood** or products derived from **blood** is the risk of transmission of viral contamination. Various prospective studies have shown that the incidence of posttransfusion hepatitis in recipients of hepatitis B surface antigen negative **blood** collected from volunteer donors ranges from 4 to 14 percent (Blum and Vyas, Haematologia, (1982), 15: 153-173). There is also. . . Acquired Immunodeficiency Syndrome (variously called HTLV-III, LAV or HIV), cytomegalovirus, Epstein-Barr virus or HTLV-I, the putative causative agent for adult **T cell lymphoma** leukemia. Products derived from animal **blood** are also at risk since such **blood** may contain a number of pathogenic agents including the viruses causing rabies, encephalitis, foot-and-mouth disease, etc.

L16 ANSWER 49 OF 51 USPATFULL on STN
AN 92:31859 USPATFULL
TI Adenosine derivatives with therapeutic activity
IN Carson, Dennis A., Del Mar, CA, United States
Carrera, Carlos J., San Diego, CA, United States
PA The Scripps Research Institute, La Jolla, CA, United States (U.S. corporation)
PI US 5106837 19920421 <--
AI US 1990-460351 19900103 (7)
RLI Continuation-in-part of Ser. No. US 1989-323350, filed on 14 Mar 1989, now abandoned And a continuation-in-part of Ser. No. US 1988-169618, filed on 16 Mar 1988, now abandoned which is a continuation-in-part of Ser. No. US 1986-825215, filed on 3 Feb 1986, now abandoned
DT Utility
FS Granted
EXNAM Primary Examiner: Brown, Johnnie R.; Assistant Examiner: Crane, L. Eric
LREP Dressler, Goldsmith, Shore, Sutker & Milnamow, Ltd.
CLMN Number of Claims: 4
ECL Exemplary Claim: 1
DRWN 7 Drawing Figure(s); 7 Drawing Page(s)
LN.CNT 1401
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
PI US 5106837 19920421 <--
DRWD . . . graph showing the results of a study of the cytotoxicity of 2-chlorodeoxyadenosine (CdA) toward three cell types in the peripheral **blood** of eight cutaneous **T-cell lymphoma** patients A continuous intravenous **infusion** of CdA (0.1 mg/ml in isotonic saline) was administered to each patient at a dosage of 0.1 mg/kg per day, with the patients receiving therapy for seven days. **Blood** samples were removed daily and cell counts performed, with averaged values being shown. Graph symbols are as follows: .quadrature.=monocytes, +=neutrophils. . .
DETD Eight cutaneous **T-cell lymphoma** patients were administered continuous intravenous **infusion** of a composition containing 2-chlorodeoxyadenosine at a dosage of 0.1 mg/kg of body weight per day in isotonic saline. **Blood** samples were obtained daily and the number of viable cells present were enumerated daily for seven days after treatment.

L16 ANSWER 46 OF 51 USPATFULL on STN
AN 95:54300 USPATFULL
TI Therapeutic and diagnostic methods using leukocyte surface antigens
IN Rittershaus, Charles W., Malden, MA, United States
Tian, Wei-Tao, Allston, MA, United States
Kung, Patrick C., Lexington, MA, United States
PA T Cell Diagnostics, Inc., Woburn, MA, United States (U.S. corporation)
PI US 5426029 19950620 <--
AI US 1990-610494 19901107 (7)
RLI Continuation-in-part of Ser. No. US 1989-434398, filed on 9 Nov 1989, now patented, Pat. No. US 5292636 which is a continuation-in-part of Ser. No. US 1988-254551, filed on 6 Oct 1988, now abandoned which is a continuation-in-part of Ser. No. US 1987-20819, filed on 2 Mar 1987, now patented, Pat. No. US 5006459 which is a continuation-in-part of Ser. No. US 1986-846230, filed on 31 Mar 1986, now abandoned
DT Utility
FS Granted
EXNAM Primary Examiner: Saunders, David
LREP Pennie & Edmonds
CLMN Number of Claims: 18
ECL Exemplary Claim: 1
DRWN 17 Drawing Figure(s); 12 Drawing Page(s)
LN.CNT 4142
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
PI US 5426029 19950620 <--
DETD . . . THE PRESENT
INVENTION

I. Infectious Diseases Induced by virus
Herpesvirus
Cytomegalovirus
Epstein-Barr Virus
HTLV-I
HTLV-III/LAV/HIV (AIDS)
II. Cancer
B or T cell leukemia
HTLV-I- associated adult T cell leukemia
B or **T cell lymphoma**
Burkitt's lymphoma
Hairy cell leukemia
Sezary syndrome
Hodgkin's disease
Chronic lymphocytic leukemia
Non-Hodgkin's lymphoma
B-cell acute lymphoblastic leukemia
Solid tumors
III. Autoinmune Diseases
Rheumatoid arthritis
Diabetes
Multiple sclerosis
Systemic lupus erythematosis
IV. Organ Allograft Rejection
V. Red **Blood** Cell Diseases
Autoimmune hemolytic anemia
Transfusion
Paraxismal nocturnal hemaglobinurea
Familial Mediterranean fever
